## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER U-R-14-18

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

## AB VOLVO PENTA

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following AB Volvo Penta, 1998 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Construction and Industrial Equipment

Fuel Type: Diesel

Fuel Type: Dies		Exhaust Emission Control
Engine Family	Liters (Cubic Inches)	Systems and Special Features
WVPXL06.7AAA	6.7 (402)	Turbocharger Smoke Puff Limiter
(TD730VE)		. production engine

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOX), and particulate matters (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (g/bhp-hr)				Smoke	Smoke Opacity ( % )			
_Exnaus			PM_	Accel	Luq	<u>Peak</u>		
THC	<u>co_</u>	NOX	<u> </u>	20	15	<b>50</b>		
1.0	8.5	6.9	0.4	20				

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

percent (%), fo	r this	engine i	amity o	-hr)	smoke C	pacity	( % )
F	xhaust	Emissio		<u>PM</u>	Accel	<u>Luq</u>	<u>Peak</u>
Engine Family	THC	<u>co</u>	<u>NOX</u>	0.2	9	9	9
WVPXL06.7AAA (TD730VE)	0.4	0.7	5.4	0.2			115 +bo

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this

y of March 1998

R. B. Summerfield, Chief Mobile Source Operations Division

## LARGE ENGINE MODEL SUMMARY

4-R-14-18

Process Code: Carry over Manufacturer: AB VOLVO PENTA

EPA Engine Family: WVPXL06.7AAA

Manufacturer Family Name:

TD730VE

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 EM, SPL, TC EM, SPL, TC 57.3 48.2 7.Fuel Rate: mm/stroke@peak torque 103@515 119@590 6.Torque @ RPM (SEA Gross) 590@1440 515@1400 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 83.5 7.4.7 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 104@201 93@182 3.BHP@RPM (SAE Gross) 201@2400 182@2400 2.Engine Model TD730VE **TD730VE** 1.Engine Code